GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR

OIL SELF-SUFFICIENCY AND SECURITY OF SUPPLY THE CASE FOR HIBERNIA

A Position Paper

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Oil self-sufficiency and security of supply has long been a mainstay of Canada's energy policy. This is as it should be. As a policy objective, it is as valid today as at any time in the past. It is an objective which, has been and should continue to be, supported by both levels of government. To abandon it now would be to ignore the lessons of the past and to place in certain jeopardy the domestic oil supply for the not-too-distant future.

Canada is now self-sufficient in light oil for the first time since 1974, when it was achieved for a brief period starting in 1972. Domestic demand for oil increased from 1,200,000 barrels per day in 1966 to 1,500,000 barrels per day in 1985, peaking at 2,000,000 barrels per day in 1979. Over the same period, Canada was able to increase its production of light crude oil and equivalents from 700,000 barrels per day to 1,000,000 barrels per day. This demonstrates that even with price controls that kept Canadian prices substantially below international levels, our commitment to the self-sufficiency and security of supply objectives enabled us to overcome massive demand increases. Our ability to recognize the importance of oil security and self-sufficiency ensured that domestic supplies were able to increase at an even more rapid pace than demand.

There is little doubt that our present surplus position can, in large measure, be credited to the success of past policies directed toward oil self-sufficiency and national security of supply. Without such policies, it is likely

that Canada, instead of being in the enviable position of a net oil exporter, would presently be importing a, by no means, insignificant quantity of its oil requirements. We should feel fortunate that we do not have to deal with the additional unemployment and balance of payments effects that would have otherwise occurred.

Notwithstanding our past success, we should avoid being drawn into a sense of false security. The present oil surplus position is judged by many to be somewhat of an aberration and is projected to be short-lived. This is illustrated by the attached graph.

The National Energy Board has recently published an updated projection of Canada's energy supply and demand over the period 1985 - 2005. This new forecast replaces that which was published in 1984. The format and methodology are essentially the same between the two reports; however, in the earlier report, projections were made on the basis of one oil price forecast and a range around it, while, in the latest report, forecasts are provided under two distinct price scenarios. In addition, different economic growth assumptions are used for the alternate oil price scenarios. These changes highlight the sensitivity of energy supply and demand to oil prices and substantiates the importance of oil in the overall energy picture and, indeed, in the economy as a whole.

In this latest forecast, the National Energy Board predicts that Canada will again be a net importer of between

258,000 and 300,000 barrels of light oil per day by 1990 under its high and low oil price assumptions, respectively. By the year 2005, this shortfall will have increased to 530,000 barrels per day and could go as high as 895,000 barrels per day, again depending on price. Assuming that reality will be closer to the midpoint between the low and high assumptions, this shortfall can be translated into approximately 2.6 billion equivalent 1986 Canadian dollars by 1990 that will go to purchase crude from foreign sources. By the year 2005 this figure is forecasted to escalate to approximately 7.6 billion dollars. To anyone genuinely concerned with self-sufficiency, national security of supply and the Canadian balance of payments, these must be alarming projections. Further, the shortfall anticipated under the high price case assumes production from two additional upgraders as well as that from the Beaufort and Hibernia. If this production is not forthcoming, the gravity of the circumstances described above can only be expected to deepen.

Present economic expectations dictate that a concerted national effort is required if we do not wish to find ourselves by the early to mid 1990's at the whim of a very unpredictable and unstable international petroleum market.

We have, in Canada, the potential to resolve what might otherwise become a very serious situation. We simply have to put the mechanisms in place that will convert Canada's potential resources into economically recoverable reserves. Given the long lead time necessary to bring new developments

on stream, the time for action is now. We do not have the luxury of waiting until conventional sources run out. It is not a simple matter of turning on some tap. Development of productive capacity either in frontier areas or from unconventional sources could take six to eight years, or longer.

The above discussion addresses the need for self-sufficiency and security of supply in light crude oil and equivalents, and highlights the potential balance of payments costs through increased imports. Recently, there has come to the fore a movement advocating self-sufficiency in 'total energy' as opposed to oil self-sufficiency. The argument runs that we, as a nation, need not aim for self-sufficiency in oil if we have another source of energy in sufficient supply to make up the shortfall. Under this thesis, we need only concern ourselves with self-sufficiency in 'total energy'. This would be acceptable if all forms of energy were completely substitutable. But complete substitutability among energy sources is far from a reality. For example, nuclear or hydro-generated electrical energy have little applicability for use in transportation. The National Energy Board predicts that within the next 6 to 8 years, oil demand by the transportation sector alone will exceed light crude oil supply. Considering that this shortfall will worsen as time goes on, one can immediately recognize a very serious problem. Furthermore, crude oil is the lowest cost source of transportation fuel available, with no other known fuel having the characteristics of, and being competitive with, reasonably priced crude oil.

Advocating 'total energy' self-sufficiency as opposed to oil self-sufficiency fails to recognize the place and importance that oil holds in the realities of Canada's economic, social and geographic structure.

Throughout Canada, and internationally, there is a growing awareness of the need for policies directed toward ensuring a secure oil supply, both now and in the future. Those that remember the oil embargoes and rapidly escalating prices of the early and late 1970's appreciate the need for concern. Many nations are becoming increasingly conscious of the dangers of insecure supplies of this strategic commodity. This is particularly true for the United States and Japan. The following quotations from "Petroleum Intelligence Weekly" highlight the motivation behind the present policy of the United States to buy oil for storage.

> "By October (1985) the strategic (US oil) reserve will hold 489 million of the 750 million barrel goal."
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> -Petroleum Intelligence Weekly, July 29/85, p.3

> "...the US government may continue to add to its strategic reserves...because enough lawmakers see a large stockpile as crucial to national security."
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> -Petroleum Intelligence Weekly, Aug. 12/85, p.5

Japan, with no domestic oil supplies, is taking a different route to supply security. It has chosen a policy of investment in energy projects in politically stable areas.

Unlike the United States and Japan, Canada has a choice. We can choose to go through the 1990's and beyond as a net importer of light oil or we can choose to develop our own massive oil potential. Development of the giant Hibernia oil field with a planned production rate of 110,000 barrels per day would represent a significant addition to Canada's oil production capacity. At a cost of approximately $ 5.0 billion , Hibernia represents one of the largest capital expenditure programs in Canada in the foreseeable future. An additional $ 5.0 billion is estimated for operating and transportation phase activities. Over Hibernia's 20 year life, under current estimates, Canadians will benefit from the production of 500 million barrels of oil. This reserve estimate is very likely low. Upwards of 750 million barrels will, in all likelihood, be eventually produced. Furthermore, it is estimated that the upper reserve production potential is in the order of 1000 million barrels. Simply considering the balance between exports and imports alone, one can see from the attached graph that, after 1992, Hibernia can make up a significant portion of our projected oil shortfall.

In its Environmental Impact Statement, Mobil estimates that the Hibernia project will increase Canada's gross domestic product by approximately 14 billion dollars and that the associated increase in direct, indirect and induced employment will be in the order of 129,000 person-years.

Justice requires that, within the Canadian nation, there be a more-or-less equal distribution of wealth. This

concept is well recognized through such programs as Unemployment Insurance and Equalization. The fact remains, however, that a tremendous disparity still exists and this disparity is felt most in the Atlantic region. A project such as Hibernia would contribute greatly to eliminating this disparity and, at the very least, would enable Newfoundland to earn a livelihood through employment in jobs that have a future rather than subsist on job creation projects that are seemingly unconnected with the economic marketplace and, at best, have a time horizon of 6 to 12 months.

The above discussion highlights the costs and security risks of allowing Canada to fall back into a deficit position with respect to oil production. The danger, and indeed, tragedy, of allowing such an eventuality involves more than the balance of oil exports and imports. It manifests itself, most importantly, in terms of our ability to retain and enhance a Canadian capability to procure and execute large scale oil and gas projects. Indeed, a recent survey by officials of the Canada-Newfoundland Offshore Petroleum Board, the Newfoundland Petroleum Directorate and the Canada Oil and Gas Lands Administration of the Hibernia Procurement and Supply, and Engineering Management and Design Contractors reveals a deep concern that, because of the current downturn, our ability to effectively and competitively complete such work has already suffered and that if the start of Hibernia is put off until the 1990's the foreign content will probably be significantly greater than what is currently estimated. Obviously, the Canadian

supply community recognizes that probably the most important benefit to be derived from the development of oil fields such as Hibernia is the transfer of technology to Newfoundland and other Canadian firms. They are well aware that this, in turn, will ensure our greater participation in other field developments, and will, since the offshore Newfoundland developments will challenge the latest technology, offer opportunities for local firms to eventually export technology to developments in other parts of the world.

Technology transfer and research and development benefits from Hibernia represent only the beginning. Other potential petroleum developments offer exciting possibilities in the area of floating production technology. Apart from the production of hydrocarbons, what is most intriguing about such technology is its direct applicability to the more general area of marine operations in arctic and sub-arctic environments. The possibilities that these and the related sub-sea technologies offer for the future, in areas such as marine weather forecasting, navigation and marine mining operations on the one hand, and for the extension of Canadian sovereignty, especially in the arctic, on the other, seem boundless. The question that we should be asking is not can we afford to support these developments, but rather, can we afford not to?

SUPPLY AND DEMAND – LIGHT CRUDE OIL

BASED ON NEB HIGH PRICE CASE